

1 CLAIMS

We claim:

5 1. The method of reducing stress in a center pivot irrigation system during a period of time that the system is not functioning and is experiencing cooler temperatures with the system having:

- 10 a) a pivot support assembly including a horizontally extending pipe portion;
- b) an elongated irrigation pipeline, having inner and outer ends, supported upon a plurality of spaced-apart drive towers;
- c) the inner end of the pipeline being connected to the horizontally extending pipe portion of the pivot support assembly;

comprising the following steps:

- 15 d) disconnecting the inner end of the pipeline from the horizontally extending pipe portion of the pivot support assembly;
- e) while maintaining the inner end of the pipeline in alignment with the horizontally extending pipe portion of the pivot support assembly to facilitate the reconnection of the inner end of the pipeline to the horizontally extending pipe portion of the pivot support assembly when
- 20 the system is going to be used to irrigate.

2. The method of claim 1 wherein a support assembly is secured to and extends between the horizontally extending pipe portion and the inner end of the pipeline.

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1           3.     The method of claim 1 wherein a flex joint is provided on said horizontally extending pipe portion.

          4.     The method of reducing stress in a center pivot infringement irrigation system during a period of time that the system will not be operating having:

- 5           a)     a pivot support assembly including an upstanding pipe connected to a source of water;
- b)     a horizontally extending pipe portion at the upper end of the upstanding pipe which is in fluid communication therewith;
- 10          c)     an elongated irrigation pipeline supported upon a plurality of spaced-apart driver towers and having inner and outer ends;
- d)     the inner end of the pipeline being fluidly connected to the horizontally extending pipe portion;

          comprising the following steps:

- 15          e)     disconnecting the inner end of the pipeline from the horizontally extending pipe portion;
- f)     while maintaining the inner end of the pipeline in alignment with the horizontally extending pipe portion to ease the reconnection of the inner
- 20          end of the pipeline to the horizontally extending pipe portion.

          5.     The method of claim 4 wherein a support assembly is secured to and extends between the horizontally extending pipe portion and the inner end of the pipeline.

1           6.     The method of claim 4 wherein a flex joint is provided on said  
horizontally extending pipe portion.

          7.     An irrigation system, comprising:

a pivot support structure;

5     an elongated irrigation pipeline supported upon a plurality of spaced-apart driver  
towers;

said pipeline having inner and outer ends;

said pivot support structure including a generally vertically disposed pipe fluidly  
10       connected to a source of water, and a horizontally extending pipe portion at the  
upper end of said generally vertically disposed pipe;

said inner end of said pipeline being fluidly connected to said horizontally extending  
pipe portion

15     a disconnect alignment assembly operatively secured to and extending between said  
horizontally extending pipe portion and said inner end of said pipeline;

said disconnect alignment assembly adapted to maintain said inner end of said  
pipeline in alignment with said pipe portion when said inner end of said pipeline  
is disconnected from said horizontally extending pipe portion to reduce stress in  
20     the system during a period of time that the system will not be functioning and to  
facilitate the subsequent reconnection of the inner end of the pipeline to the  
horizontally extending pipe portion when the system is going to be used to  
irrigate.

1           8.     The irrigation system of claim 7 wherein a flex joint is operatively  
secured to said pipe portion.

          9.     The irrigation system of claim 7 wherein said disconnect alignment  
assembly comprises:

- 5           (a)    a first support means secured to said horizontally extending pipe portion;
- (b)    an elongated member having inner and outer ends, said inner end of  
                said elongated member being secured to said first support;
- (c)    a second support means on said inner end of said pipeline;
- 10          (d)    said second support means movably receiving said elongated member.

          10.    The irrigation system of claim 9 wherein said second support includes a  
pair of horizontally spaced-apart support members; each of said support members  
having upper and lower rollers mounted thereon; said elongated member being  
movably received between said upper and lower rollers on said support members.

15          11.    The irrigation system of claim 10 wherein said second support is  
removably clamped onto said inner end of said pipeline.